

1 1. (Amended) A wireless communication system serving at least one subscriber unit
2 operating within a respective service, the wireless communication system comprising:

3 a base station that provides wireless coverage within the service area, the base station
4 establishing a forward link and a reverse link with the subscriber unit, communications
5 transmitted to the subscriber unit on the forward link and communications received from the
6 subscriber unit on the reverse link;

AI 7 the base station, based upon system conditions and reverse link power control step sizes
8 supported by the subscriber unit, selecting a reverse link power control step size for the
9 subscriber unit;

10 the base station directing the subscriber unit to make adjustments to the power level of
11 reverse link transmissions by a selected power control step size; and

12 based upon the power level of reverse link transmissions from the subscriber unit
13 received by the base station, the base station periodically directing the subscriber unit to
14 increment or decrement the power level of reverse link transmissions by the selected power
15 control step size in an attempt to cause the reverse link transmissions to arrive at the base station
16 at a desired power level.

17 [and subscriber unit controlling a power level of transmissions on the reverse link in an
18 attempt to cause the transmissions on the reverse link to arrive at the base station at desired
19 power levels;

20 the subscriber unit incrementally altering the power level of transmissions on the reverse
21 link by an adjustable power control step size, with the power control step size dynamically
22 determined based upon system conditions.]

1 In claim 4, line 3, remove the second period.

1 11. (Amended) The wireless communication system of claim 1, wherein:

2 a plurality of subscriber units communicate with the base station via respective forward
3 links and respective reverse links;

4 for each of the plurality of subscriber units, based upon system conditions and reverse
5 link power control step sizes supported by the subscriber unit, the base station selecting a
6 respective power control step size for the subscriber unit;

7 for each of the plurality of subscriber units, the base station directing the subscriber unit
8 to make adjustments to the power level of respective reverse link transmissions by a respective
9 selected power control step size; and

10 for each of the plurality of subscriber units, the base station [dynamically directs]
11 periodically directing the [each] subscriber unit to increment or decrement [adjust] its respective
12 reverse link power transmission level by the respective selected power control step size [based
13 upon system conditions].

f 12. (Amended) The wireless communication system of claim 11, wherein the system

2 conditions include the types of services being provided to the plurality of [used by the] subscriber
3 units.

1 16. (Amended) A subscriber unit for use with a wireless communication system
2 comprised of at least one base station that provides wireless coverage to the subscriber unit
3 within a service area, the subscriber unit comprising of:

4 a processing unit;

5 a radio transceiver unit coupled to the processing unit that communicates with the base
6 station on both a forward link and a reverse link, communications [transmitted to] received by
7 the subscriber unit from the base station on the forward link and communications transmitted by
8 the subscriber unit to the base station [from the subscriber unit] on the reverse link, the radio
9 transceiver unit capable of incrementing or decrementing the power level of transmissions on the
10 reverse link by a plurality of supported power control step sizes;

11 [the base station and subscriber unit controlling a power level of transmissions on the
12 reverse link in an attempt to cause the transmissions on the reverse link to arrive at the base
13 station at desired power levels;]

14 the subscriber unit receiving a selected power control step size from the base station that
15 was selected by the base station based upon system conditions and the plurality of power control
16 step sizes supported by the subscriber unit; and

17 the subscriber unit periodically incrementing or decrementing [incrementally altering] the
18 power level of transmissions on the reverse link by the selected reverse link power control step,
19 the incrementing or decrementing performed in an attempt to cause the transmissions on the
20 reverse link to arrive at the base station at desired power levels. [an adjustable power control step
21 size, and the power control step size dynamically determined based upon system conditions.]

19. (Amended) The subscriber unit of claim 16, wherein the system conditions include the type of services being provided to the subscriber unit by the base station.

24. (Amended) The subscriber unit of claim 16, wherein the base station [may] directs the subscriber unit to adjust the power control step size via general handoff direction messages, extended channel assignment messages and supplemental channel assignment messages.

28. (Amended) A method of operating a wireless communication system that serves at least one subscriber unit operating in a service area, the method comprising:

establishing a forward link and a reverse link between a base station and a subscriber unit, communications transmitted to the subscriber unit from the base station on the forward link and communications transmitted to the base station from the subscriber unit on the reverse link;

[controlling a power level of transmissions on the reverse link to cause the transmissions on the reverse link to arrive at the base station at the desired power levels;]

selecting, by the base station, a power control step size for the subscriber unit based upon system conditions and power control step sizes supported by the subscriber unit;

the base station directing the subscriber unit to use the selected power control step size for subsequent adjustments of the power level of transmissions on the reverse link; and

the base station periodically directing the subscriber unit to increment or decrement [incrementally altering] the power level of transmissions on the reverse link by [an adjustable] the selected power control step size to cause the transmissions on the reverse link to arrive at the base station at desired power levels. [, and

the power control step size dynamically determined based upon system conditions.]

Please add the following new claims:

1 438. A power control signal embodied on a carrier wave transmitted from a base
2 station to a subscriber unit in a wireless communication system that causes the subscriber unit to
3 set its reverse link power control step size to a reverse link power control step size selected by
4 the base station based upon system conditions and power control step sizes supported by the
5 subscriber unit, the power control signal comprising:

6 a first type field information that identifies the power control signal;

7 a second type field information that identifies an acknowledgement sequence number;

8 a third type field information that identifies a message sequence number;

9 a fourth type field information that indicates whether acknowledgement is required;

10 a fifth type field information that indicates an encryption; and

11 a sixth type field information that directs the subscriber unit to set its reverse link power
12 control step size to the reverse link power control step size selected by the base station. h

1 439. The method of claim 38, wherein the first message type field information
2 comprises message type field information. h

1 440. The method of claim 38, wherein the second message type field information
2 comprises acknowledgement sequence field information. h

1 441. The method of claim 38, wherein the third message type field information
2 comprises message sequence field information. h

1 42. The method of claim 38, wherein the fourth message type field information
2 comprises acknowledgement sequence requirement field information.

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Cont.
1 43. The method of claim 38, wherein the fifth message type field information
2 comprises message encryption indication field information.

1 44. The method of claim 38, wherein the sixth message type field information
2 comprises power control field information.

1 38
14.45. A base station that supports wireless communications with a subscriber unit, the
2 base station comprising:
3 a subscriber unit interface that supports forward link transmissions to the subscriber unit
4 and the receipt of reverse link transmissions from the subscriber unit;
5 a reverse link power control step size determination unit that, based upon power control
6 step size capabilities of the subscriber unit and system conditions, determines a reverse link
7 power control step size to be employed by the subscriber unit;
8 the base station directing the subscriber unit to increment or decrement the power of
9 reverse link transmissions by the reverse link power control step size; and
10 based upon the power level of reverse link transmissions from the subscriber unit
11 received by the base station, the base station periodically directing the subscriber unit to
12 increment or decrement the power level of reverse link transmissions by the selected power
13 control step size in an attempt to cause the reverse link transmissions to arrive at the base station
14 at a desired power level. M)

SUMMARY OF THE OFFICE ACTION AND THE APPLICANTS' RESPONSE

In the Office Action, the Examiner rejected claims 12, 19 and 24 under 35 U.S.C. 112, second paragraph. The Applicants have amended such claims to overcome the rejections.

In the Office Action, the Examiner rejected claims 1-3, 5, 6, 11 14, and 28-31 under 35 U.S.C. 103(a) over Gilhousen et al. (U.S. patent 5,603,096) in view of Lomp (U.S. patent 5,574,747). The Examiner rejected claims 16-18 under 35 U.S.C. 103(a) over Gilhousen et al. in view of Lomp and the Applicants' RELATED ART disclosure. The Examiner further rejected claims 8, 9, 21, 22, 33, and 34 under 35 U.S.C. 103(a) over Gilhousen et al. and Lomp in view of